FY 2013 Budget Priorities Proposal – Ecosystems, America's Great Outdoors, and Oceans
Consolidated List of Projects/Programs as Submitted by
BOR, EPA, FWS, NMFS, NRCS, USACE, USGS
(Provided in alphabetical order with proposed ranking criteria)

Focus Area: Bay-Delta Ecosystem

Goals:

1. Renewed Federal-State partnership
2. Smarter water supply and use
3. Habitat restoration
4. Floodplain and drought management

Tier 1 Priorities

Identify 3-5 projects or programs (**total**, not per agency or per goal) that are the highest priority for this Ecosystem, AGO, or Oceans, including a project/program title and description (including contributing agencies), progress that would be made in FY 2013 if the effort is funded, the goal(s) that this project or program contributes to, and the estimated Federal cost of the project or program in FY 2013, including the allocation by participating agency. The priorities may be undertaken by a single agency or multiple agencies. Three examples are provided below.

All projects or programs should also be included in agency budget submissions. More detailed information about specific projects can be included as attachments. These project data sheets should include a longer project description, detailed budget information (including the proposed funding source, funding history, and total costs), long-term outputs and outcomes, expected overall completion date if the project is long-term, selection criteria if used, and a cross-reference to agency budget submissions (page numbers) and the ecosystem restoration plan, if included. They should be no longer than one page.

Submitting Agency	Project/Program Title and Description (include Contributing Agencies)	Outcome(s) Anticipated in FY 2013*	Goal Number Contributing to	Estimated Cost for FY13 ($m)	Criteria 1	Criteria 2	Criteria 3	Possible Consolidation
BOR 1-1	Partnerships: Federal support to the State of California and stakeholders from the Department of the Interior, through the Bureau of Reclamation (Reclamation), the Fish and Wildlife Service (FWS), and Geological Survey (USGS); the Department of Commerce, through the National Oceanic and Atmospheric Administration's National Marine Fisheries Service (NMFS); the U.S. Army Corps of Engineers (USACE); and the Environmental	Federal support to California in completing the BDCP and related NEPA/CEQA environmental documents; development of a Biological Assessment and related NEPA documents for the Integrated Biological Opinion for the long-term	Identified in IFAP #1, #2, #3 Pages 7,8	$5.9 million Does not include estimated cost for DOI and Reclamation	a	a	a	Consolidate with FWS 1-1, FWS 1-2 and FWS 2-2

	Protection Agency (EPA). Participating Agencies: Reclamation/FWS/NMFS/EPA/USGS/USACE/NRCS	operations of the State Water Project (SWP) and the Central Valley Project (CVP); development and implementation of ecosystem restoration projects; partnering with California on development of surface storage feasibility studies; and assisting California in implementing the Delta Reform Act of 2009.		P&A support.				
BOR 1-2	Delta Science studies - Investigation of the causes and consequences of the recent declines in the relative abundance of pelagic organisms in the Bay-Delta, including the delta smelt, a species listed as threatened under the Endangered Species Act. Uses expert evaluations and scientific assessments and assistance in CALFED agencies efforts to monitor and evaluate the performance of all CALFED Program elements. Also continues investigations by Reclamation, in coordination with other local, state, and Federal agencies, to research and test alternative ways of protecting threatened and endangered fish species and other sensitive aquatic species. Participating Agencies: Reclamation/FWS/NMFS/USGS	Completion of studies that will inform development of the long-term operations of the SWP and CVP integrated biological opinion, including Delta Outflow Adaptive Management Plan. Some of the unresolved scientific issues that will be further examined as part of the Integrated Biological Opinion Strategy include fish mortality at the pumps and caused by operations, Delta contaminants, foodweb dynamics, predation, benefits of habitat restoration, and anadromous fish migration studies.	Identified in IFAP #2	$16.8	a	a	a	Consolidate with NMFS 1-1, NMFS 1-2, NMFS 1-3, USGS 1-1, USGS 2-1, USGS 2-2 and USGS 2-3
BOR 1-3	Yolo Bypass Ecosystem Restoration Project - The goal of the project is to increase the frequency, duration, and extent of inundation of the Yolo Bypass to increase the availability of shallow floodplain habitat known to provide good spawning conditions for splittail and good rearing conditions for splittail and juvenile Chinook salmon. A technical team representing multiple state and federal agency agencies is considering modifications to the existing U.S. Army Corps of Engineers - operated Fremont Weir and/or Sacramento Weir to allow greater floodplain activation in the Yolo Bypass during the spring. Various management strategies are being developed in	Begins the development of NEPA and CEQA environmental documentation and Planning activities	Identified in IFAP #1, #2, #3	$2	a	a	a	

	concert with local landowners and stakeholders within the Yolo Bypass that have also identified the potential for additional spring flooding of the Bypass to provide habitat improvements for special-status fish species. Other efforts include analysis and implementation of actions to improve fish passage and reduce fish stranding. Participating agencies: Reclamation/FWS/NMFS/USACE/EPA							
EPA 1-1	Water quality monitoring and assessment program for the Delta and its tributaries. (See page 15 of IFAP). This should involve EPA, USGS, BOR, FWS, NOAA, Corps, working with State agencies (SWRCB, CVRWQCB, DWR, DFG, DSC), possibly using IEP as a forum. Considerable water quality monitoring is underway though it is somewhat fragmented. Data is collected in incompatible formats and there is no systematic attempt to analyze or effectively use the information. Water quality improvement efforts would be more effective if existing and planning monitoring were integrated, including, at a minimum, IEP, Delta RMP (which is beginning to coordinate discharge permit monitoring), BDCP, San Joaquin River Restoration and Grasslands Bypass Project.	Pulse of the Delta report (3rd annual); Expansion of Pesticide Loadings model (to target BMPs); Draft water quality monitoring program for implementation of BDCP and San Joaquin River Restoration, building on ongoing monitoring programs.	Identified in IFAP #3	TBD	a	a	b	
FWS 1-1	Continue the collaborative process to complete and initiate implementation of the BDCP (BOR/FWS/BOR/NOAA/COE/EPA)	• A Final EIR/EIS, Record of Decision, and Integrated BiOp, for the Bay-Delta Conservation Plan and related operations of the State Water Project and Federal Central Valley Project • Initial implementation of a permitted BDCP	Identified in IFAP #1 Page 7	$1.251	a	a	a	Consolidate with BOR 1-1 ,FWS 1-1, FWS 1-2 and FWS 2-2
FWS 1-2	Continue to work with State and other Federal agencies to assist implementation of water supply enhancements	• Continued implementation and completion of water infrastructure projects	Identified in IFAP #1,#2	$1.826	a	a	a	Consolidate with BOR 1-1 , FWS 1-1, FWS 1-2 and FWS 2-2
FWS 1-3	Advance restoration activities within the Bay-Delta Estuary (FWS/BOR/COE/NOAA)	• Collaboration with Federal Agencies and key State Agencies will restore thousands of acres of	Identified in IFAP #3	$5.403	a	a	a	

		Delta and Delta watershed wetland, riparian, and in-stream habitat for numerous fish and wildlife species and provide extensive technical assistance • Complete habitat assessments, remove or bypass barriers, to reopen miles of stream for fish passage • Sustained Federal, State, and local government partnerships to support development of a facility designed to support the propagation and restoration of Delta native fish species • Enhanced invasive species prevention and control efforts, including surveys for early detection of and rapid response to aquatic invasive species • Enhanced participation in the Interagency Ecological Program and related special studies • Enhanced ability of Landscape Conservation Cooperatives to address critical water supply and ecological needs to achieve smarter supply and use of water, improved water quality, and ability to provide for drought relief and flood management						
NMFS 1-1	Support the actions required under the NMFS Biological Opinion on the Coordinated Operations of the Central Valley Project (CVP) and State Water Project (SWP)	Assist in adaptive management decisions regarding real time operation of the state and Federal	Identified in IFAP #2, #3	1.6	a	a	a	Consolidate with BOR 1-2, NMFS 1-1, NMFS 1-2,

	on listed Chinook salmon, steelhead and green sturgeon. Specifically, NOAA will support coordination of compliance and permitting with the Bureau of Reclamation and the California Department of Water Resources, including ESA Section 7 consultations on infrastructure projects, long-term water contracts, fish screens, temperature control structures, and fish passage above dams.	Central Valley water projects.						NMFS 1-3, USGS 1-1, USGS 2-1, USGS 2-2 and USGS 2-3
NMFS 1-2	Support the actions required under the integrated NMFS Biological Opinion on the Long-Term Operations of the Central Valley Project and State Water Project on listed Chinook salmon, steelhead and green sturgeon. Specifically, NOAA will support coordination of compliance and permitting with the Bureau of Reclamation and the California Department of Water Resources, including ESA Section 7 consultations on infrastructure projects, long-term water contracts, fish screens, temperature control structures, and fish passage above dams.	Assist in adaptive management decisions regarding real time operation of the state and Federal Central Valley water projects.	Identified in IFAP #2, #3	Not included in 2013 budget	a	a	a	Consolidate with BOR 1-2, NMFS 1-1, NMFS 1-2, NMFS 1-3, USGS 1-1, USGS 2-1, USGS 2-2 and USGS 2-3
NMFS 1-3	Integrated modeling is needed to improve the ability to assess the risks of actions, predict action outcomes, and to evaluate adjustments to actions of the Operations Criteria and Plan Biological Opinion on listed Chinook salmon, steelhead and green sturgeon.	Release of integrated model.	Identified in IFAP #2, #3 Page 11	5.0 Not included in 2013 budget	a	a	a	Consolidate with BOR 1-2, NMFS 1-1, NMFS 1-2, NMFS 1-3, USGS 1-1, USGS 2-1, USGS 2-2 and USGS 2-3
NMFS 1-4	Implement Fish Passage Program RPA of Operations Criteria and Plan Biological Opinion including near-term and long-term fish passage actions.	Completion of fish passage pilot project including pilot reintroduction program. Completion of schedule of long-term fish passage plan.	Identified in IFAP #3 Page 20	5.0 Not included in 2013 budget	a	b	c	
USACE 1-1	Bay Delta—BDCP Program CALFED Coordination Pinole Shoal (Delta Long Term Management Strategy Yuba River Fish Passage CALFED Levee Stability Pgm Central Valley Integrated Flood Management Study (CVIFMS) Delta Integrated Levee Feasibility Study (DILFS)	This program will deliver substantial system benefits to the BDCP and state. The proposed priorities captures a comprehensive suite of benefits from flood planning, flood capacity expansion, emergency conveyance and response,	Identified in IFAP #1 IFAP #4 IFAP #3 IFAP #2, #4 IFAP #4 IFAP #4	Estimated $18.2M	a a a a a a	a c c c c c	a c b a b b	Consolidate with FSW 2-1

		ecosystem restoration, water systems operations, navigation and beneficial use of dredged material. These priorities also link multiple geographies critical to the Bay Delta and BDC, connecting the upper watershed above the rim dams with the Central Valley and the Bay. Through these priorities, relationships and collaborations at all levels of government are also strengthening including states, local, federal and other stakeholders.	Pages 8, 16, 17, 20, 23					
USGS 1-1	Hydrological and Biological Studies in support of Habitat Restoration	Understanding of the hydrological and biological processes.	Identified in IFAP #2 Pages 10, 11	$5.376	a	a	a	Consolidate with BOR 1-2, NMFS 1-1, NMFS 1-2, NMFS 1-3, USGS 1-1, USGS 2-1, USGS 2-2 and USGS 2-3

*Please note how the above are connected to other existing efforts and if they contribute to progress on High Priority Performance Goals.

Tier 2 Priorities

Identify 3-5 projects or programs (**total**, not per agency or per goal) that are the second highest priority for this Ecosystem, AGO, or Oceans, including a project/program title and description (including P agencies), progress that would be made in FY 2013 if the effort is funded, the goal(s) that this project or program contributes to, and the estimated Federal cost of the project or program in FY 2013, including the allocation by participating agency.

All projects or programs should also be included in agency budget submissions. More detailed information about specific projects can be included as attachments. These project data sheets should include a longer project description, detailed budget information (including the proposed funding source, funding history, and total costs), long-term outputs and outcomes, expected overall completion date if the project is long-term, selection criteria if used, and a cross-reference to agency budget submissions (page numbers). They should be no longer than one page.

Submitting	Project/Program Title and Description (include Contributing	Outcome(s) Anticipated in FY 2013*	Goal Number	Estimated Cost	Criteri	Criteri	Criteri	Possible

Agency	Agencies)		Contributing to	for FY13 ($m)	a 1	a 2	a 3	Consolidation
BOR 2-1	San Joaquin River Restoration Program – The Restoration Program is a comprehensive long-term effort to restore flows to the San Joaquin River from Friant Dam to the Merced River restoring a self-sustaining Chinook salmon fishery in the river while reducing or avoiding adverse water supply impacts from restoration flows. The Restoration Program implements the Stipulation of Settlement in NRDC, et al. v. Kirk Rodgers, et al., consistent with Public Law 111-11. Participating agencies: Reclamation/NMFS/FWS/USACE/USGS/EPA	Continue planning, engineering, environmental compliance, fishery management, water operations, and public involvement activities related to the Restoration and Water Management goals in the Settlement. Significant actions planned for implementation in FY 2013 include the following: (1) continue with activities to reintroduce spring-run Chinook salmon to the San Joaquin River; (2) continued release of initial flows from Friant Dam and implementation of associated monitoring and reporting program; (3) continued biological, seepage, and levee stability actions to prepare for higher flow releases in the future; (4) completion of planning, final design and permitting efforts for the high-priority channel and structural improvements projects and continued land acquisition for some projects; (5) beginning construction of the Arroyo Canal Fish Screen and Sack Dam Fish Passage and the Salt and Mud Slough Barriers projects; and (6) continued construction for the Friant-Kern Canal and Madera Canal Capacity Correction projects.	Identified in IFAP #3 Page 17	$14	a	a	b	
BOR 2-2	CALFED Integrated Surface Storage Studies - Feasibility studies and related environmental documentation for potential surface storage projects identified in the CALFED Bay-Delta Program ROD (2000) to	Complete draft feasibility reports and related environmental documentation for the surface storage projects.	Contributes to IFAP #1, #2, #3	$4.4	b	a	b	

	improve water supply reliability, water quality and ecosystem management in California's Central Valley and Sacramento-San Joaquin Delta through expanded storage capacity and increased operational flexibility. The studies include the modification and enlargement of Shasta and Los Vaqueros dams and reservoirs, and new storage facilities in Upper San Joaquin River Basin upstream of Friant Dam and Millerton Lake and North of the Delta at Sites, California. Studies focus on the environmental analyses, engineering design and cost estimates, economic and financial analyses, identification of recommended plans, and the development of planning reports and supporting documentation. Participating agencies: Reclamation/FWS/NMFS/USACE/EPA							
EPA 2-1	Pesticide science: Expand knowledge of the impacts of pesticides on aquatic species, including pesticide fate and transport and detection method development. Work would involve EPA, USGS, FWS, NOAA AND NRCS.	Input to FIFRA pesticide registration process. Input to improve discharge permits and their implementation. Input to improve pesticide water quality standards and TMDLs.	Identified in IFAP #3 Page 15	TBD	a	a	c	
FWS 2-1	Continue to work with State and Federal agencies to address integration of flood risk management in California's Central Valley, including efforts associated with Corps of Engineers and DWR levee management and floodplain restoration	• LCCs – will address critical water supply and ecological needs to achieve smarter supply and use of water, improved water quality, and ability to provide for drought relief and flood management	Identified in IFAP #4	$.123	a	a	a	Consolidate with USACE 1-1
FWS 2-2	Continue to provide technical assistance to the Delta Stewardship Council and the Sacramento-San Joaquin Delta Conservancy	• Improved integration of activities in the Delta	Identified in IFAP #1	$.100	a	a	a	Consolidate with BOR 1-1, FWS 1-1 and FWS 1-2
NRCS 2-1	Deliver on-farm water quality and habitat restoration implementation	Increased implementation of agricultural water quality conservation practices and on-farm habitat restoration.	Identified in IFAP # 3	$24.1M	c	c	c	
NRCS 2-2	Deliver on-farm water quantity implementation	Increased agricultural water use efficiency on-farm and increased water yield from meadow restoration. HPPG	Identified in IFAP # 2	$28.5M	a	c	c	Consolidate with BOR 3-1

		in two watersheds.						
USGS 2-1	Accelerated Field Study of Potential Smelt-Turbidity Relationship	Results from sampling before, during and after turbid events	Identified in IFAP #3	$0.35 not included in 2013 budget	a	a	a	Consolidate with BOR 1-2, NMFS 1-1, NMFS 1-2, NMFS 1-3, USGS 1-1, USGS 2-1, USGS 2-2 and USGS 2-3
USGS 2-2	Acoustic Telemetry Network and Understanding Salmon Migration	Location of fish movement to correlate with flow structures and hydrodynamic conditions	Identified in IFAP #3	$1.2 not included in 2013 budget	a	a	a	Consolidate with BOR 1-2, NMFS 1-1, NMFS 1-2, NMFS 1-3, USGS 1-1, USGS 2-1, USGS 2-2 and USGS 2-3
USGS 2-3	Real-time Flow Monitoring Stations in the Delta	28 long-term stations to document changes in the system	Identified in IFAP #3	$5.5 not included in 2013 budget	a	a	a	Consolidate with BOR 1-2, NMFS 1-1, NMFS 1-2, NMFS 1-3, USGS 1-1, USGS 2-1, USGS 2-2 and USGS 2-3

*Please note how the above are connected to other existing efforts and if they contribute to progress on High Priority Performance Goals.

Tier 3 Priorities

Identify 3-5 projects or programs (**total**, not per agency or per goal) that are the next highest priority for this Ecosystem, AGO, or Oceans, including a project/program title and description (including participating agencies), progress that would be made in FY 2013 if the effort is funded, the goal(s) that this project or program contributes to, and the estimated Federal cost of the project or program in FY 2013, including the allocation by participating agency.

All projects or programs should also be included in agency budget submissions. More detailed information about specific projects can be included as attachments. These project data sheets should include a longer project description, detailed budget information (including the proposed funding source, funding history, and total costs), long-term outputs and outcomes, expected overall completion date if the project is long-term, selection criteria if used, and a cross-reference to agency budget submissions (page numbers). They should be no longer than one page.

Submitting Agency	Project/Program Title and Description (include Contributing Agencies)	Outcome(s) Anticipated in FY 2013*	Goal Number Contributing to	Estimated Cost for FY13 ($m)	Criteria 1	Criteria 2	Criteria 3	Possible Consolidation
BOR 3-1	Strengthen Water Conservation Efforts - Reclamation administers the Central Valley Project (CVP) Water Conservation Program (Program) activities. Carries out duties required under the Central Valley Project Improvement Act of 1992 (CVPIA) (P.L. 102-575) and the Reclamation Reform Act of 1982 (RRA) (P.L. 97-293), which includes the development and administration several criteria – the Standard Criteria for Evaluating Water Management Plans, the Regional Criteria for the Sacramento Valley, and the Criteria for Developing Refuge Water Management Plans. Section 3405 (e) of the CVPIA, P.L. 102-575, directs the Secretary of the Interior (Secretary) to establish and administer an office on Central Valley water conservation best management practices that shall ". . . develop criteria for evaluating the adequacy of all water conservation plans developed by project contractors, including those plans required by Section 210 of the RRA, Public Law 97-293." Implement water conservation measures through a competitive, water use efficiency grant program offered to water districts, irrigation districts, resource conservation districts, urban water agencies, etc. This program is designed to encourage cost shared water conservation projects that meet the objectives contained in the Bay-Delta Water Use Efficiency Program. Benefits of the awarded projects will include increased water supply reliability, water quality improvements, and contributions to ecosystem restoration. Participating agencies:	Provide technical assistance and cost share grants to agricultural entities and municipal water agencies for water management improvements.	Identified in IFAP #2	$2	a	c	c	Consolidate with NRCS 2-2

	Reclamation/NRCS/EPA/USACE							
USGS 3-1	Predicting and Preventing Crisis in Irrigated Water Use in a Changing Climate	Begin development of scenario modeling to measure and map changes and trends in agricultural water productivity in CA	Identified in IFAP #3	$1.25 not included in 2013 budget Page 18	a	b	c	
USGS 3-2	Seismic ground motions impacting levee and infrastructure stability	Initial installation of an array	Contributes to IFAP #3	$0.8 not included in 2013 budget	b	c	b	
USGS 3-3	Levee stability and liquefaction	Initial findings from cone penetration testing	Contributes to IFAP #3	$0.5 not included in 2013 budget	b	c	b	

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